

ABSTRACT OF THE DISCLOSURE

Methods and apparatus for forming a plurality of uniformly sized solder balls utilize a stencil having a plurality of holes of uniform volume disposed on a substrate. Solder is disposed in the holes of the stencil on the substrate. Typically, the solder is in the form of solder paste which is distributed into the holes using a squeegee. While within the holes of the stencil on the substrate, the solder is melted to form solder balls. The stencil may then be removed to leave the solder balls on the substrate, or the solder balls may be removed while the stencil remains on the substrate.